PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: June 12, 2018

Name of Applicant: Oneok Rockies Midstream, L.L.C.

Source: Riverview Terminal

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 4631-03.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Quality Bureau (Bureau) of the Department at the address in the footer of this cover letter. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by June 27, 2018. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the address in the footer of this cover letter. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Rhonda Payne
Air Quality Scientist
Air Quality Bureau
(406) 444-5287

JM:RP
Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: ONEOK Rockies Midstream, LLC
P.O. Box 871
Tulsa, OK 74102-0871

MAQP: #1995-19
Application Complete: 5/18/2018
Preliminary Determination Issued: 6/12/2018
Department's Decision Issued:
Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to ONEOK Rockies Midstream, LLC (ORM), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

This facility is located in the East ½ of the Northwest ¼ of Section 17 and the Southeast ¼ of the Southwest ¼ of Section 8, Township 22 North, Range 59 East, in Richland County (47.67305, -104.17926). The physical address of the facility is 34958 County Road 122, Sidney, MT 59270.

B. Current Permit Action

On May 5, 2018, the Department of Environmental Quality (Department) received a permit application to modify ORM's MAQP to add an EPA-certified Tier III emergency engine/generator set to the facility and to revise fugitive component counts and emissions. The proposed generator is an EPA certified diesel-fired unit manufactured in 2012. The current permit action incorporates these changes as well as updates the emissions inventory, rule references and language used by the Department.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. ORM shall limit the loading of Spec-grade Natural Gas Liquid (NGL) into railcar tanks to 153,300,000 gallons per rolling 12-month period (ARM 17.8.749).

2. ORM shall limit the loading of Y-grade NGL into railcar tanks to 689,860,000 gallons per rolling 12-month period (ARM 17.8.749).

3. ORM shall limit the transfer of isobutane from tank trucks into railcar tanks to 16,425,000 gallons per rolling 12-month period (ARM 17.8.749).

4. ORM shall maintain and operate a closed system during all loading, transfer, and storage operations. Loading lines shall be equipped and maintained with vapor tight valves. Each transfer line shall be equipped and operated to utilize a pump to pull vapors from cargo tanks back into the storage tank system (ARM 17.8.752).

5. All loading of Spec-grade NGL, Y-Grade NGL, and isobutane into cargo tanks shall be accomplished utilizing submerged fill methods. Cargo tanks loaded shall be specifically designed for the transportation of natural gas liquids/liquefied petroleum gases (ARM 17.8.752).

6. ORM shall maintain all equipment and operations, including loading pipe connections and loading operations, in dimensions, design parameters, and loading methods as presented in MAQP application #4631-00 (ARM 17.8.749 and ARM 17.8.752).

7. ORM shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

8. ORM shall route emissions from booster station scheduled maintenance blow-downs to the air-assisted flare for control (ARM 17.8.749 and ARM 17.8.752).

9. Operation of the air-assisted flare shall be limited to 500 total hours during any rolling 12-month period (ARM 17.8.749).

10. ORM shall not operate the 107 HP emergency generator for more than 100 hours per year for the purposes of maintenance checks and readiness testing per 40 CFR part 60 subpart JJJJ (ARM 17.8.749).

11. ORM shall have a non-resettable hour meter on the 107 HP emergency generator to record hours of operation (ARM 17.8.749).

12. The diesel-fired emergency generator engine shall not exceed 463 HP and shall be compliant with the Environmental Protection Agency's (EPA) Tier 3 or higher non-road compression-ignition engine emission standards pursuant to 40 CFR Part 89.112 (ARM 17.8.749).

13. ORM shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Engines*, 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable propane-fired engine (ARM 17.8.340; 40 CFR 60, Subpart JJJJ; 40 CFR 60 Subpart IIII, ARM 17.8.342; and 40 CFR 63, Subpart ZZZZ).

B. Inspection and Maintenance Requirements

1. Once within every calendar month, all tanks, valves, flanges, connectors, compressor/booster seals, relief valves, pump seals, loading lines, loading valves, and open-ended lines capable of inspection, shall be inspected for wear and/or excessive leaks. For purposes of this requirement, leak detection methods incorporating sight, sound, or smell are acceptable (ARM 17.8.105 and ARM 17.8.752).

2. ORM shall (ARM 17.8.105 and ARM 17.8.752):

   a. Take reasonable actions to mitigate any leaks found during the inspection as soon as possible.

   b. Make a first attempt at repair of the cause of any leak or any defective parts found as soon as possible, but no later than 5calendar days after the leak or defective part is detected, except as provided in Section II.B.3; and

   c. Completely repair any source of leaks or defective parts found as soon as possible, but no later than 15 calendar days after the leak or defective part is detected, except as provided in Section II.B.3.

3. Delay of repair of equipment would be allowed if repair as required by Section II.B.2 is deemed infeasible for technical or safety related reasons. ORM shall limit, to the extent possible, emissions from any such equipment, and such equipment shall be repaired as soon as reasonably possible (ARM 17.8.752).

C. Recordkeeping Requirements

1. ORM shall document the monthly inspections, indicating the date and time of the inspection, the results, and the method(s), date, and completion time for any mitigation efforts and repairs made (ARM 17.8.749).

2. For any repair delayed under the exception of II.B.3 above, the duration of any leak, a general description of the repair required, and the reasons justifying the delay, shall be recorded and maintained with the records required in Section II.C.1 (ARM 17.8.749).

3. ORM shall record the hours of emergency generators' operation and the purpose for which the generators were operated (ARM 17.8.749).

D. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department may require testing (ARM 17.8.105).

E. Reporting Requirements

1. ORM shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on estimated

actual emissions from the facility, and/or to verify compliance with permit limitations. ORM shall include a brief summary of the log required by Section II.C. if any inspections for the reporting period note leaks (ARM 17.8.505).

2. ORM shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include the ***addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by ORM as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

4. ORM shall document, by month, the gallons of Spec-grade NGL product loaded to cargo tanks. By the 25th day of each month, ORM shall total the gallons of product loading for the previous month, and calculate and record the rolling 12-month sum. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

5. ORM shall document, by month, the gallons of Y-grade NGL loaded to cargo tanks. By the 25th day of each month, ORM shall total the gallons of Y-grade NGL loading for the previous month, and calculate and record the rolling 12-month sum. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.2. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. ORM shall document, by month, the gallons of isobutane loaded between cargo tanks. By the 25th day of each month, ORM shall total the gallons of isobutane loading for the previous month, and calculate and record the rolling 12-month sum. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. ORM shall submit with the annual emission inventory the number of hours that the emergency generators were operated, including those hours operated for the purpose of maintenance and readiness checks (ARM 17.8.749).

F. Notification

ORM shall provide the Department with written notification of the actual start-up date of the 463 HP emergency generator postmarked within 15 days after the actual start-up date (ARM 17.8.749)

SECTION III: General Conditions

A. Inspection – ORM shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS), continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if ORM fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ORM of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the MAQP shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by ORM may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

I. Introduction/Process Description

ONEOK Rockies Midstream, LLC (ORM) owns and operates the Riverview Terminal which serves as a natural gas liquids (NGL) storage and transfer facility. This facility is located in the East ½, Northwest ¼, Section 17 and Southeast ¼, Southwest ¼, Section 8, Township 22 North, Range 59 East, in Richland County and is known as the Riverview Terminal.

A. Permitted Equipment

The facility consists of, but is not limited to, the following equipment:

- Six (6) 90,000-gallon (gal) pressurized mix of primarily propane, butane, and natural gasoline (Y-Grade) storage tanks
- Four (4) 30,000-gal pressurized propane or butane product tanks
- Two (2) 60,000-gal pressurized propane or butane product tanks
- One (1) 30,000-gal methanol tank
- Isobutane loading from tank trucks directly to railcar tanks
- Fifteen (15) station loading rack for Spec-grade NGL product from storage tanks to cargo tanks
- Fifteen (15) station loading rack for Y-grade NGL from storage tanks to railcar tanks
- One (1) 107 horsepower (HP) propane-fired emergency generator
- One (1) 463 HP diesel-fired emergency generator
- Three (3) electric booster pumps
- One (1) Zeeco air-assisted smokeless flare
- Associated equipment (valves, flanges, piping network, connectors, pig launcher, etc.)

B. Source Description

The facility receives NGL's from surrounding gas plants by way of pipeline and truck and stores product for eventual transfer via railcar or pipeline. Spec-grade liquid product (propane and butane) is piped into horizontal pressure tanks which are stored for loading into railcar cargo tanks. Isobutane is transferred on-site from tank trucks directly to railcars. Y-grade product, consisting primarily of unseparated propane, butane, and natural gasoline, is also received and stored on-site for loading to railcar cargo tanks or introduced into a pipeline for transportation via ONEOK's Bakken pipeline. Methanol is stored on-site for freeze protection.

All transfer, storage, and loading operations are maintained under pressure. Transfers and loading are maintained as a pressurized, submerged fill, closed vapor collection system. The pressurized tank loading lines have a vapor tight valve at the ends so any vapors are contained within a closed system. Vapor displacement resulting from load-out operations is located at the end of each transfer line and a pump is used to pull vapors in the system back into the product tank(s). Submerged fill loading minimizes the creation of vapors during the loading process.

Truck unloading of isobutane to railcars is accomplished with a similar system, utilizing submerged fill and a closed vapor collection system. A vapor return line is used to return any vapors in the connecting lines back to the truck vessel. Only vapors contained in the two hoses between the connections would escape to atmosphere.

Pipeline transfer to downstream facilities is accomplished through electric booster pumps which route gathered NGL's directly to a pipeline for distribution. Fugitive emissions from leaks of components in both liquid and gas service are minimized through inspection, leak detection, and proper operations and maintenance, to minimize emissions and fire and/or explosion hazards. A single air-assisted flare is installed at the booster station to control emissions during scheduled blow-down or venting events.

C. Permit History

Bear Paw Energy proposed to construct and operate an expansion of the Riverview Terminal. The facility has been operating since 1982 storing and loading natural gas liquids transported from surrounding gas plants via pipeline and truck. Relatively pure propane or butane (product) is piped into horizontal pressurized tanks where they are stored for loading. Bear Paw Energy proposed an expansion that would increase the facility's potential volatile organic compound (VOC) emissions to more than the permitting threshold of 25 tons per year; therefore, an MAQP was required. **MAQP #4631-00** was issued final on May 5, 2011.

The Department of Environmental Quality (Department) received notification on June 18, 2012, from Bear Paw Energy, LLC which requested an administrative amendment (AA) to change the facility name to ONEOK Rockies Midstream, LLC (ORM). A second request was received by the Department on July 2, 2012, to remove a propane blanket as an emission source and to add an emergency generator as an insignificant source. The two permit actions were combined into a single administrative permit revision. All permit references with the exception of the permit history were changed throughout the MAQP. **MAQP #4631-01** replaced MAQP #4631-00.

On March 5, 2013, the Department received a permit application to modify ORM's MAQP to include equipment from the adjacent Riverview Booster Station. This permit action incorporated the electric booster pumps, a single air-assisted flare, and associated fugitive emissions. **MAQP #4631-02** replaced MAQP #4631-01.

D. Current Permit Action

On May 5, 2018, the Department received a permit application to modify ORM's MAQP to add a second emergency generator to the facility and to revise fugitive component counts and emissions. The proposed generator is an EPA certified diesel-fired unit manufactured in 2012. The addition of the generator and fugitive components are part of an upgrade to the terminal. In addition to installation of the generator, the project includes construction of a rail car inventory storage yard, a rail switch system to enable rail cars to access the NGL filling facility from the rail car storage area, a station inlet sampling chromatograph and a rail car management system. These activities do not require a change to the air quality permit. Liquid throughputs will increase compared to past actual throughputs, but will not require

an increase in permitted volumes. The current permit action incorporates these changes as well as updates the emissions inventory, rule reference and language used by the Department. **MAQP #4631-03** replaces MAQP #4631-01.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   ORM shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an aerodynamic diameter of 10 microns or less (PM_{10})

ORM must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions are taken to control emissions of airborne particulate matter. (2) Under this rule, ORM shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulation (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Applicability to NSPS standards (40 CFR 60) are as follows:

   a. 40 CFR, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 40 CFR Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engine (CI-ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart.

      Based on the information submitted by ORM, the CI ICE to be used under MAQP #4631-03 is subject to this subpart because the generator/engine set was manufactured in 2012. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. The generator/engine set used by ORM is subject to this requirement.

   c. 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The provisions of this subpart are applicable to owners and operators of stationary spark ignition internal combustion emergency generator engines with a maximum engine power greater than 25 horsepower that commence construction after June 12, 2006 and were manufactured on or after January 1, 2009. The propane-fired emergency generator owned and operated under MAQP #4631-03 is subject to this subpart.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. ORM shall comply with the requirements of 40 CFR Part 63, as applicable, including the following subparts:

   a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:

   b. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary RICE at a major or area source of HAP emissions is subject to this subpart, except if the stationary RICE is being tested at a stationary RICE test cell/stand. Therefore, ORM is subject to this subpart.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an MAQP application fee concurrent with the submittal of an MAQP application. A permit application is incomplete until the proper application fee is paid to the Department. ORM submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an MAQP (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

   An air quality operation fee is separate and distinct from an MAQP application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an MAQP or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. ORM has a PTE greater than 25 tons per year of Volatile Organic Compounds (VOC); therefore, an MAQP is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the MAQP program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the MAQP Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. ORM submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. ORM submitted an affidavit of publication of public notice for the May 27, 2018, issue of the *Sidney Herald*, a newspaper of general circulation in the Town of Sidney in Richland County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that MAQPs shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving ORM of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An MAQP may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an MAQP may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

a. PTE > 100 tpy of any pollutant;

b. PTE > 10 tons/year of any single hazardous air pollutant (HAP), PTE > 25 tpy of total combined HAPs, or lesser quantity as the Department may establish by rule; or

c. PTE > 70 tpy of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4631-03 for ORM, the following conclusions were made:

a. The facility's PTE is less than 100 tpy for any pollutant.

b. The facility's PTE is less than 10 tpy for any one HAP and less than 25 tpy for all HAPs.

c. This source is not located in a serious PM_{10} nonattainment area.

d. This facility is subject to NSPS 40 CFR 60 subparts IIII and JJJJ.

e. This facility is subject to NESHAP 40 CFR 63 subpart ZZZZ.

f. This source is not a Title IV affected source

g. This source is not a solid waste combustion unit.

h. This source is not an EPA designated Title V source

Based on these facts, the Department determined that ORM will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, ORM will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for any new or modified source. ORM shall install on the new or modified source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be utilized.

ORM currently operates the Riverview Terminal in the storage and transfer of NGL products. Under the current permit action ORM proposes the installation and operation of a diesel-fired, 463 HP emergency generator. Due to the limited amount of emissions produced by the diesel-fired engine used in association with MAQP #4631-03 and the lack of cost effective add-on controls, such add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel-fired engines.

In addition, the stationary diesel-fired engine is subject to the federal engine emission standards for engines found in Standards of Performance for New Stationary Sources (40 CFR 60, Subpart IIII), and/or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engines constitutes BACT for this engine.

IV. Emission Inventory

Fugitive Emissions Potential To Emit [TPY]

Emission Source	PM	PM_{10}	$PM_{2.5}$	CO	NOx	SO_2	VOC
Riverview Terminal - Equipment Leaks	--	--	--	--	--	--	27.55
Riverview Terminal - Equipment Leaks (Gas	--	--	--	--	--	--	15.46
Spec-grade Product Loading	--	--	--	--	--	--	7.27
Y-grade Product Loading	--	--	--	--	--	--	28.16
Isobutane Truck Unloading	--	--	--	--	--	--	1.17
Isobutane Product Loading	--	--	--	--	--	--	0.75
Riverview Booster Station - Equipment Leaks	--	--	--	--	--	--	6.81
Riverview Booster Station - Unscheduled	--	--	--	--	--	--	9.45
Total Fugitive Emissions ►	0.00	0.00	0.00	0.00	0.00	0.00	96.62

Non-Fugitive Emissions Potential To Emit [TPY]

Emission Source	PM	PM_{10}	$PM_{2.5}$	CO	NOx	SO_2	VOC
Emergency Generator – 107 HP	0.01	0.01	0.04	8.20	0.13	0.02	0.05
Emergency Generator – 463 HP	0.02	0.02	0.02	0.11	0.63	0.21	0.02
Air-Assisted Flare - Pilot Gas	--	--	--	0.32	0.06	0.01	0.12
Air-Assisted Flare - Process Gas	--	--	--	7.51	1.38	0.008	2.84
Total Non-Fugitive Emissions ►	0.01	0.01	0.04	16.03	1.57	0.04	3.03

BACT, Best Available Control Technology bbl, barrel bhp, brake-horsepower Btu, British Thermal Units CO, carbon monoxide Ft^3, cubic feet g, gram gal, gallon HHV, high-heating value lb, pound kg, kilogram MMBtu, million British Thermal Units MMscf, million standard cubic feet	NGL, natural gas liquids NO_X, oxides of nitrogen PM, particulate matter PM_{COND}, condensable particulate matter PM_{10}, particulate matter with an aerodynamic diameter of ≤10 microns $PM_{2.5}$, particulate matter with an aerodynamic diameter of ≤2.5 microns [Sum of condensable and filterable] ppmw, parts per million by weight PTE, Potential To Emit SO_2, oxides of sulfur SP, specific gravity TPH, tons per hour TPY, tons per year VOC, volatile organic compounds

Riverview Terminal Emission Inventory

Fugitive Emissions - Equipment Leaks [SCC 3-10-002-05]

Light Liquid Service: Natural Gas Liquids

Equipment Configuration		Emission Factor		VOC Emissions	
Component(s)	Number of Components	kg/hr-source	lbs/hr-source	lbs/hr	TPY
Valves	588	0.0025	0.0055	3.24	14.19
Pump Seals	40	0.013	0.0287	1.15	5.02
Other [Relief Valves]	80	0.0075	0.0165	1.32	5.79
Connectors	308	0.00021	0.0005	0.14	0.62
Flanges	340	0.00011	0.0002	0.08	0.36
Open-end Lines	116	0.0014	0.0031	0.36	1.57
			Total VOC ►	6.250	27.55

Basis: Protocol for Equipment Leak Emission Estimates Table 2-4 Light-Oil Service [EPA-453/R-95-017, 11/1995]

Gas Service: Isobutane

Equipment Configuration		Emission Factor		VOC Emissions	
Component(s)	Number of Components	kg/hr-source	lbs/hr-source	lbs/hr	TPY
Valves	168	0.0045	0.0099	1.67	7.30
Pump Seals	0	0.0024	0.0194	0.0	0.0
Other [Relief Valves]	54	0.0088	0.0194	1.05	4.59
Connectors	264	0.0002	0.0004	0.12	0.51
Flanges	340	0.00039	0.0009	0.29	1.28
Open-end Lines	92	0.002	0.0044	0.41	1.78
			Total VOC ►	3.410	15.46

Basis: Protocol for Equipment Leak Emission Estimates Table 2-4 Gas Service [EPA-453/R-95-017, 11/1995]

Fugitive Emissions - Liquid Product Loading Losses [SCC 4-04-002-50]

Pipe Connection Specifications:

Pipe Diameter:	2	Inches
Segment Length:	20	Inches
Volume of Segment:	62.83	cu. Inches [per segment or connection]
	0.0364	cu. feet [per segment or connection]
Total Loss Volume:	0.0728	cu. feet per tank loading [two segments per tank connection]

Product Data:

Spec-grade	36.52	lbs/ft^3
Y-grade	31.22	lbs/ft^3
Isobutane	35.15	lbs/ft^3

Liquid Loading Calculations

	Loading Throughput		Loadings/Disconnections				
Product	[gal/day]	[gal/yr]	Source	Daily	Annually	[lbs/load]	[lbs/day]
Spec-grade	420,000	153,300,000	Railcar Load[2]	15	5,475	2.66	39.86
Y-grade	1,890,027	689,860,000	Railcar Load[2]	68	24,638	2.27	153.33
Isobutane	45,000	16,425,000	Truck Unload[1]	5	1,825	1.28	6.39
			Railcar Load[2]	2	587	2.56	4.11

Propane-Fired Generator Engine [SCC 2-02-010-07]

Engine Rating:	107	hp [Design Maximum Output; Generac Engine specification]
Fuel Input:	1.01	mmbtu/hr [Calculated @ 90,500 btu/gal; AP-42, Appendix A-6]
	11.14	gal/hour [Calculated @ 4.24 lbs/gal; AP-42, Appendix A-6]
	47.24	lbs/hour [Generac Engine Specification]
Hours of Operation:	500	hours/year

Particulate Emissions (uncontrolled):

PM Emissions:

Emission Factor	0.0384 lb/mmbtu [AP-42 Table 3.2-1, 07/00]	
Calculations	(0.0384 lb/mmbtu) * (1.01 mmbtu/hr) =	0.04 lbs/hr
	(0.04 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.01 TPY

PM_{10} Emissions:

Emission Factor	0.0384 lb/mmbtu [AP-42 Table 3.2-1, 07/00]	
Calculations	(0.0384 lb/mmbtu) * (1.01 mmbtu/hr) =	0.04 lbs/hr
	(0.04 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.01 TPY

$PM_{2.5}$ Emissions (filterable):

Emission Factor	0.0384 lb/mmbtu [AP-42 Table 3.2-1, 07/00]	
Calculations	(0.0384 lb/mmbtu) * (1.01 mmbtu/hr) =	0.04 lbs/hr
	(0.04 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.01 TPY

$PM_{2.5}$ Emissions (condensable):

Emission Factor	0.0099 lb/mmbtu [AP-42 Table 3.2-1, 07/00]	
Calculations	(0.00991 lb/mmbtu) * (1.01 mmbtu/hr) =	0.01 lbs/hr
	(0.01 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.002 TPY

CO Emissions (uncontrolled):

Emission Factor	138.95 g/bhp-hr [Generac Engine Specification]	
Calculations	(138.95 g/hp-hr) * (107 bhp) * (0.002205 lb/gram) =	32.78 lbs/hr
	(32.78 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	8.20 TPY

NO_x Emissions (uncontrolled):

Emission Factor	2.17 g/bhp-hr [Generac Engine Specification]	
Calculations	(2.17 g/hp-hr) * (107 bhp) * (0.002205 lb/gram) =	0.51 lbs/hr
	(0.51 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.13 TPY

SO_2 Emissions (uncontrolled):

Emission Factor 0.00059 lb/mmbtu [AP-42 Table 3.2-1, 07/00]

Calculations	(0.000588 lb/hp-hr) * (bhp) =	0.06 lbs/hr
	(0.06 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.02 TPY

VOC Emissions (uncontrolled):

Emission Factor	0.920 g/bhp-hr* [Generac Engine Specification]	
Calculations	(0.92 g/hp-hr) * (107 bhp) * (0.002205 lb/gram) =	0.22 lbs/hr
	(0.22 lbs/hr) * (500 hrs/yr) * (0.0005 tons/lb) =	0.05 TPY
	** As total hydrocarbons (THC)*	

Diesel-Fired Generator Engine [SCC 2-01-001-02]

Engine Rating:	463	hp [Design Maximum Output; John Deere Engine specification]
Fuel Input:	2.85	mmBtu/hr
Hours of Operation:	500	hours/year

PM Emissions:

PM Emissions = 0.04 ton/yr (Assume PM = PM10)	0.04	ton/yr
PM Emissions = 76.56 lbs/yr (Assume PM = PM10)	76.56	lbs/yr

PM-10 Emissions:

Emission Factor = 0.000330695121144646 lbs/hp-hr (EPA Tier 3 emission standards)	3.31E-04	lbs/hp-hr
Calculation: (500 hours) * (463 hp) * (0.000330695121144646 lbs/hp-hr) * (ton/2000 lb) =	0.04	ton/yr
Calculation: (500 hours) * (463 hp) * (0.000330695121144646 lbs/hp-hr) =	76.56	lbs/yr

NOx Emissions:

Emission Factor = 0.00661390242289292 lbs/hp-hr (EPA Tier 3 emission standards, NOx+VOC)	6.61E-03	lbs/hp-hr
Calculation: (500 hours) * (463 hp) * (0.00661390242289292 lbs/hp-hr) * (ton/2000 lb) =	0.77	ton/yr
Calculation: (500 hours) * (463 hp) * (0.00661390242289292 lbs/hp-hr) =	1531.12	lbs/yr

CO Emissions:

Emission Factor = 0.0057320487665072 lbs/hp-hr (EPA Tier 3 emission standards)	5.73E-03	lbs/hp-hr
Calculation: (500 hours) * (463 hp) * (0.0057320487665072 lbs/hp-hr) * (ton/2000 lb) =	0.66	ton/yr
Calculation: (500 hours) * (463 hp) * (0.0057320487665072 lbs/hp-hr) =	1326.97	lbs/yr

VOC Emissions:

Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)	2.51E-03	lbs/hp-hr
Calculation: (500 hours) * (463 bhp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 0.29 ton/yr Assume TOC = VOC	0.29	ton/yr
Calculation: (500 hours) * (463 hp) * (0.0025141 lbs/hp-hr) =	582.01	lbs/yr

SOx Emissions:

Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	2.05E-03	lbs/hp-hr
Calculation: (500 hours) * (463 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) =	0.24	ton/yr
Calculation: (500 hours) * (463 hp) * (0.00205 lbs/hp-hr) =	474.58	lbs/yr

Riverview Booster Station Emission Inventory

Fugitive Emissions - Equipment Leaks [SCC 3-10-002-05]

Light Liquid Service: Natural Gas Liquids

Equipment Configuration		Emission Factor		VOC Emissions	
Component(s)	Number of Components	kg/hr-source	lbs/hr-source	lbs/hr	TPY
Valves	194	0.0025	0.0055	1.07	4.69
Pump Seals	3	0.013	0.0287	0.10	0.43
Other	1	0.0075	0.0165	0.02	0.08
Connectors	592	0.00021	0.0005	0.27	1.20
Flanges	102	0.00011	0.0002	0.02	0.11
Open-end Lines	22	0.0014	0.0031	0.07	0.30
			Total VOC ►	1.56	6.81

Basis: Protocol for Equipment Leak Emission Estimates Table 2-4 Light-Oil Service [EPA-453/R-95-017, 11/1995]

Fugitive Emissions - Unscheduled Venting & Blow-down [SCC 3-06-004-02]

NGL Properties:	4.50	lbs/gal
Annual Volume	100.00	bbl/year [Application - Expected Volume]
	18901.51	lbs/year
	9.45	TPY

Flare Emissions - Pilot Gas [SCC 3-06-009-05]

Fuel Type:		
Gas Properties:		
Gas Density→	4.24	lbs/gal liquid [AP-42 Appendix A, 1/95]
Gas HHV→	90,500	btu/gallon [AP-42 Appendix A, 1/95]
Sulfur	15	gr/100 ft^3 [Industry standard]
Pilot Gas Flow	0.2	mmbtu/hr [Application]
	2.21	gal/hr
Hours of Operation:	8760	hours/year

PM Emissions:

Emission Factor:	Smokeless Flare Assumed EF = 0 lbs/106		

NOx Emissions:

Emission Factor	0.068 lbs/106 Btu [AP-42 Table 13.5-1, 1/95]		
Calculations	(0.068 lbs/mmbtu) * (0.2 mmbtu/hr) =	0.01	lbs/hr
	(0.014 lbs/hr) * (8760 hours/year) =	0.06	TPY

VOC Emissions:

Emission Factor	0.14 lbs/106 Btu [AP-42 Table 13.5-1, 1/95]		
Calculations	(0.14 lbs/mmbtu) * (0.2 mmbtu/hr) =	0.03	lbs/hr
	(0.028 lbs/hr) * (8760 hours/year) =	0.12	TPY
	*As total hydrocarbons (THC)		

CO Emissions:

Emission Factor	0.37 lbs/106 Btu [AP-42 Table 13.5-1, 1/95]		
Calculations	(0.37 lbs/mmbtu) * (0.2 mmbtu/hr) =	0.07	lbs/hr
	(0.074 lbs/hr) * (8760 hours/year) =	0.32	TPY

SO2 Emissions:

Emission Factor	0.1 x S (gr/100 ft3) lbs/103 gal [AP-42 Table 1.5-1, 7/08]		
Calculations	(0.1 lbs/1000 gal) * (15 gr/100 ft3 S) * (2.21 gal/hr) =	0.003	lbs/hr
	(0.0033 lbs/hr) * (8760 hours/year) =	0.01	TPY

Flare Emissions - Scheduled NGL Venting & Blow-down Gas [SCC 3-06-004-01]

Fuel Type: Natural Gas Liquids

NGL Properties:

SP→	0.54	[Application]
Density→	4.5	lbs/gal liquid [Calculated]
HHV→	0.1068	mmbtu/gal [Application: Back calculated from ONEOK lb/bbl Emission Factor]
	0.024	mmbtu/lb [Liquid-Calculated]
	2486.63	btu/ft3 @ STD (60F) [Gas - Calculated]
H2S Content	4.58	ppmw as sulfur [Application - Back calculated from ONEOK lb/bbl emission factor]
Flare Flow Rate:	3424	lbs/hr [Flare Manufacture - Process Conditions]
Total Heat Input:	81.2	mmbtu/hr [Flare Data and Gas Characteristics-Application]
Hours of Operation:	500	hours/year

PM Emissions:

Emission Factor:	Smokeless Flare Assumed EF = 0 lbs/106 btu		

NOx Emissions:

Emission Factor	0.068 lbs/106 Btu [AP-42 Table 13.5-1, 1/95]		
Calculations	(0.068 lbs/mmbtu) * (81.22 mmbtu/hr) =	5.52	lbs/hr
	(5.52 lbs/hr) * (500 hours/year) =	1.38	TPY

VOC Emissions:

Emission Factor	0.14 lbs/106 Btu* [AP-42 Table 13.5-1, 1/95]		
Calculations	(0.14 lbs/mmbtu) * (81.22 mmbtu/hr) =	11.37	lbs/hr
	(11.37 lbs/hr) * (500 hours/year) =	2.84	TPY
	*As total hydrocarbons		

CO Emissions:

Emission Factor	0.37 lbs/106 Btu [AP-42 Table 13.5-1, 1/95]		
Calculations	(0.37 lbs/mmbtu) * (81.22 mmbtu/hr) =	30.05	lbs/hr
	(30.05 lbs/hr) * (500 hours/year) =	7.51	TPY

SO2 Emissions:

Emission Factor	4.58 ppmw (Sulfur Concentration)		
Calculations	(4.58 ppmw)*(1/1000000)*(3424 lbs/hr)*(1 lb mol S/32.07 lb S)*(64.1 lb lb SO2/lb mol =	0.031	lbs/hr
	(0.03 lbs/hr) * (500 hours/year) =	0.008	TPY

V. Existing Air Quality

The Riverview Terminal is located approximately 1.75 miles south of Sidney, Montana, in the East ½ of the Northwest ¼ of Section 17 and the Southeast ¼ of the Southwest ¼ of Section 8, Township 22 North, Range 59 East, in Richland County. Richland County is considered unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

VI. Ambient Air Impact Analysis

The potential allowable emissions increase resulting from this permit modification does not exceed any ambient air quality modeling thresholds; therefore, the Department did not conduct ambient air quality modeling for the proposed project. The Department believes this permit action will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
✓		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	✓	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	✓	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	✓	4. Does the action deprive the owner of all economically viable uses of the property?
	✓	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?

YES	NO	
	✓	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	✓	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	✓	7a. Is the impact of government action direct, peculiar, and significant?
	✓	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	✓	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	✓	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Analysis Prepared by: R. Payne
Date: May 31, 2018

DEPARTMENT OF ENVIRONMENTAL QUALITY
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: ONEOK Rockies Midstream, LLC. (ORM)

Montana Air Quality Permit Number(MAQP): 4631-03

EA Draft: 6/12/2018
EA Final:
Permit Final:

1. *Legal Description of Site*: East ½, Northwest ¼, Section 17 and Southeast ¼, Southwest ¼, Section 8, Township 22 North, Range 59 East, in Richland County (Latitude/Longitude 47.67305, -104.17926).

2. *Description of Project*: ORM is proposing the installation of a 463 horse-power (HP) diesel-fired emergency engine/generator set and to revise fugitive component counts and emissions. These activities are part of an upgrade to the terminal.

3. *Objectives of Project*: Upgrade to the Riverview Terminal for increased natural gas liquid (NGL) receiving and storage.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the MAQP to the facility. ORM would be denied the opportunity to upgrade the terminal. This would result in the facility accepting less NGSs from surrounding gas plants and furthermore transferring less NGLs via railcar or pipeline. Any potential air emission increases that would be authorized by issuing the MAQP would not occur. However, the Department does not consider the "no-action" alternative to be appropriate because ORM demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4631-03.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The proposed project would allow for operation of an emergency diesel-fired engine/generator set, which would operate on an infrequent basis, if at all. Additionally, limitations established within MAQP #4631-03 would minimize air pollution. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. Water Quality, Quantity and Distribution

The proposed project would not result in a direct discharge to surface waters. No change in water usage at the facility would occur because of the proposed change. The Department would not expect any impacts to water quality, quantity and distribution because of the small emission increase.

C. Geology and Soil Quality, Stability and Moisture

No impacts to geology, and soil quality, stability and moisture would be expected to occur as the proposed modification would occur as equipment would be located within the facility footprint.

D. Vegetation Cover, Quantity, and Quality

No impacts to vegetation cover, quantity and quality would be expected to occur as the proposed modification would occur within the existing facility footprint.

E. Aesthetics

The proposed project would not be expected to cause any change in aesthetics, as the addition of the emergency engine/generator set would be within the existing facility boundary and the nature of site activities would remain unchanged.

F. Air Quality

Issuance of MAQP #4631-03 would permit a small increase in emissions at the facility. The conditions and limitations which would be placed in the permit, would require the facility to be constructed and operated in a manner which would minimize these emissions. The facility would remain a minor source of emissions. Minor effects to air quality would be expected because of issuing MAQP #4631-03.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department completed a species of concern report through the environmental summary function shared by the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The area was defined by the section, township, and range of the proposed location with an additional 1-mile

buffer zone. Search results identified a number of species within the search radius. Species of concern include the Black-tailed Prairie Dog, Hoary Bat, Little Brown Myotis, Townsend's Big-eared Bat, American White Pelican, Black-billed Cuckoo, Bobolink, Golden Eagle, Great Blue Heron, Least Tern, Red-headed Woodpecker, Whooping Crane, Spiny Softshell, Northern Leopard Frog, Blue Sucker, Iowa Darter, Paddlefish, Pallid Sturgeon, Sauger, Shortnose Gar, Sicklefin Chub, Sturgeon Chub, A Sand-dwelling Mayfly, Gray Comma, Brimstone Clubtail, and Pale-spiked Lobelia. The proposed project will not likely impact any of the identified species of concern, as the new equipment would be installed within the existing footprint of the facility. Furthermore, the allowable emissions increases resulting from this permit action are considered minor. Therefore, only minor impact to the identified species of concern would be expected.

H. Sage Grouse Executive Order

The Department recognizes the site location is not within the Greater Sage Grouse Habitat Area as defined by Executive Order No. 12-20158.

I. Demands on Environmental Resource of Water, Air and Energy

The proposed project would have minor impacts on the demands for the environmental resources of water and air. When the emergency engine/generator set would operate, it would be a source of air pollutants that could deposit on local waters and discharge into the local ground water supply. However as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be mitigated by the conditions in MAQP #4631-03. The Department does not expect any impacts to the energy demand due to the intermittent nature of operating the emergency engine/generator set.

J. Historical and Archaeological Sites

Construction activities would occur within the previous facility boundary that is owned and/or leased by ORM at the facility. The Department previously contacted the State Historical Preservation Office (SHPO) to disclose any potential to alter historical places or buildings. SHPO searched the location of the existing facility and determined that there are no documented records. It is SHPO's position that any structure over fifty years of age is considered historic. As long as there will be no disturbance or alteration to structures over fifty years of age, SHPO believes there is low likelihood cultural properties will be impacted.

K. Cumulative and Secondary Impacts

The Department has determined there to be minor impacts to the individual physical and biological considerations above. The project takes place on land already owned by ORM, and impacts directly associated with issuance of MAQP #4631-03 are primarily air emissions outside the property boundaries but are expected to be minor. Cumulatively, the Department would expect minor impacts to physical and biological considerations. In turn, secondary impacts would be expected to be minor.

8. SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not alter the social structure and mores as the proposed project would be within the existing facility footprint. No impacts would be expected to Social Structures and Mores.

B. Cultural Uniqueness and Diversity

The proposed project would not impact the cultural uniqueness and diversity of the area because the emergency engine/generator set would operate within the existing facility footprint. No impacts would be expected to Cultural Uniqueness and Diversity.

C. Local and State Tax Base and Tax Revenue

No impacts to local and state tax base and tax revenue would be expected with the small scale of the proposed project.

D. Agricultural or Industrial Production

MAQP #4631-03 would permit a minor modification at the existing facility. The proposed project would take place within the existing facility footprint. No impacts to agricultural or industrial production would be expected because of issuance of MAQP #4631-03.

E. Human Health

MAQP #4631-03 would contain limitations and conditions derived from rules designed to protect human health. Given the minor increase in emissions that would occur under the proposed modification, only a minor impact to human health would be expected.

F. Access to and Quality of Recreational and Wilderness Activities

The project would take place within the existing facility footprint. No impacts to access to and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The proposed project would not add permanent employees to the facility and therefore no impacts to the quantity and distribution of employment would be expected.

H. Distribution of Population

The proposed project would not result in any increase in permanent employees. A temporary increase in population in the area may result from construction related activities. The Department would not expect any impacts to the distribution of population.

I. Demands for Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #4631-03 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #4631-03. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

A temporary increase in industrial and commercial activity would be expected during the construction phase of the project given the scope of the proposed project. Any impacts would be expected to be relatively minor and short-lived. A minor increase in general industrial activity because of increased capacity of the facility would occur. Therefore, minor impact to industrial and commercial activity is expected to occur.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals for which issuance of MAQP #4631-03 would affect. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the project is small, any impacts from the facility would be minor.

L. Cumulative and Secondary Impacts

The Department would expect only minor cumulative impacts to the individual economic and social considerations above. Secondary impacts would not be expected to occur.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the addition of an emergency engine/generator set and an updated fugitive emissions inventory. MAQP #4631-03 includes conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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